

2024 MODIFIED DIVISION

R U L E B O O K

THE RULES BELOW ARE THE GENERAL GUIDELINES FOR ALL CARS THAT COMPETE IN THIS DIVISION IN THE 2024 SEASON.

IF THESE RULES DO NOT CLEARLY SAY THAT SOMETHING IS LEGAL, ASSUME THAT IT IS NOT PERMITTED. RULES SUBJECT TO CHANGE DUE TO SAFETY CONCERNS, OVERLY COMPETITIVE CARS, OR FUTURE RULES IMPOSED BY THE NJ STATE POLICE.

Please email us with tech questions: <u>WallStadiumSpeedway@gmail.com</u> or call Rob Hyer at (732) 824-4507

Note: All changes and additions from 2023 will appear in red.

REQUIRED SAFETY EQUIPMENT

- The installation of a 5 pound fire suppression system is now required in all Modified race cars. EFFECTIVE DATE AUGUST 1, 2023.
 - $\circ~$ It must at least be manual, can be upgraded to automatic.
 - \circ 1 nozzle required. Must be pointed into the cockpit (driver.)
 - SFI Certification required.
 - The bottle date must always be within 2 years of the current date.
 Recertification cost approx. \$25 plus shipping.
 - Bottle(s) must always be full and charged.
 - Visitors and drivers "new" to Wall Stadium (first race of the season) will be granted a 1 race waiver.
 - Turkey Derby is excluded.
- The use of a HANS DEVICE or Hans-like device is MANDATORY. 5 year expiration.
- Window net MANDATORY.

- 5-point Harness MANDATORY. SFI 38.1 Belts good for 2 years.
- Full face Helmets are MANDATORY. Must have Snell SA 15 or newer sticker.
- <u>Driver must wear a one piece fire suit</u> and flame retardant underwear. Both must be in good condition, no rips or holes! SFI 5
- Full containment seat MANDATORY.
- All other New Jersey State Safety Regulations MUST BE STRICTLY ADHERED TO.
- Fire Extinguisher MANDATORY. Unused and fully charged at all times.

*The minimum age to drive a Modified at Wall Stadium Speedway is 17 with substantial racing experience. If you are a minor interested in racing a modified at Wall Stadium Speedway, please contact Management for instructions at <u>wallstadiumspeedway@gmail.com</u>.

RULES AND SPECIFICATIONS

All motors sealed before November 2023 must be resealed. Contact Rob Hyer to make an appointment at (732) 824-4507.

COMPETING MODELS

Modified division races are open to eligible 1987-2002 models of American made, steel bodied, passenger car production sedans.

APPROVED MODELS

Chevrolet:	Cavalier, Monte Carlo
Dodge:	Avenger, Stealth
Ford:	Escort
Plymouth:	Laser, Sundance
Pontiac:	Sunbird, J-2000, Grand Prix

Other models may be selected when available providing they are the same in body configuration.

OVERLY COMPETITIVE CARS WILL BE SUBJECT TO INSPECTION.

TRANSPONDER

- MUST BE ON DURING PRACTICE TO VERIFY THAT IT IS WORKING PROPERLY.
- Location: 11-13" from the back of axel 2.

BODY

- All car bodies must be stock appearing.
- The body at its widest point must not exceed sixty-three inches (63").
- Car bodies must be neat appearing and painted.
- Floor area directly beneath the seat forward to the front engine firewall must be made using a minimum of one-eighth inch (1/8") thick magnetic steel.
 - The remainder of the floor area to the right and rear of the seat must be made from a minimum of twenty-two (22) gauge magnetic steel.
- Outside body panels may be made of twenty-two (22) gauge steel or aluminum .040 steel stock roofs. Fiberglass roofs will be permitted as long as they conform to the dimensions and contours of the stock steel roof.
- Belly pans of any kind are not permitted.
- Sheet metal of twenty-two (22) gauge right of driver must be angled or straight to right side door
- Front nose panel can be aluminum or steel.
 - It must not extend rearward past the rear of the harmonic balancer. Nonadjustable type nose is not to exceed from two inches (2") behind front bumper and no wider than the front of frame.
- No wings on any body parts.
- Stock cars without complete windshields must have the rear of the hood sealed or equipped with a deflector to prevent hot liquids from entering the driver's compartment
- Cars must have a hood on at all times.

<u>TIRES</u>

- Hoosier Race tire size M20 and M30 only.
- Must purchase tires at the track. Tire Bank rules apply to all cars for all 2023 season races. Long distance races have separate rules.
- See Tire Rules and/or the Special Event rules, separate rule sheets.
- The tire bank belongs to the driver, not the car.

TREAD WIDTH

• Wheel width must be maximum eighty-four inches (84") at bead, at zero toe, at spindle height, front, and rear.

WHEELS

• Maximum wheel size 15" X 15", steel only.

WHEEL BASE

• The minimum wheel base that will be permitted is at minimum 106, maximum 108.

GROUND CLEARANCE

- Two inches (2") minimum ground clearance with driver in car.
- No weight jacking devices.

CAR HEIGHT

• The car height, measured along the roof center line at its highest rearward point will be at least forty-two inches (42") high.

CAR TOTAL WEIGHT

- Spec Motor: 2650 lbs. race ready with driver.
- Wall Modified Motor: 2,650 lbs. race ready with driver.
- True Wall Motor: 10.0, World products Head, etc. 2,575 lbs. race ready with driver
 - Legal SK Type Modified: 550 lift rule, flat tappet engine, SK chassis, body, suspension, and drivetrain 2,575 lbs. May run a gauge legal 650 carburetor.
- 11 pounds must be added for every cubic inch over 359 cubic inches.
- After a 40 lap race, 50 lbs. weight loss to be deducted from the minimum weight of the car.
- Allowances for extra distance events may be made at the official's discretion.

ADDED WEIGHT

- Any bolt on lead must be painted white with car's number on it. (Ingots only)
- All weight must be located on/or in the frame only.
- No adding weight of any kind after an event.
- Bolted on Ingots must use minimum three-eighths inch (3/8") bolts.

LEFT SIDE WEIGHT

• Left side weight not to exceed fifty six percent (56.0%) of cars total before or after an event with driver in car.

BRAKES

- Only four (4) wheel hydraulic brakes are allowed.
- They must be in good working order and are subject to official testing prior to competing in any racing event.

- Brake adjusters are allowed at all times.
- No titanium brake rotors, magnetic only.

<u>HUBS</u>

- Safety racing hubs with racing five eighths inch (5/8") steel studs, with any type of steel lug nut.
- NO ultra lightweight hubs. (\$265.00 racer net limit)
- A single spindle tether on left and right front wheels MANDATORY.
- No oil filled hubs.
- Wheel bearing grease only.
- Magnetic steel wheel bearings.

FRONT BUMPER

- The front bumper must be the width of the chassis.
- The front bumper position is not to exceed thirty inches (30") from the center of front bumper to the center of front spindle.
- Front bumper must be convex in shape with round corners.
- The center of the front bumper must be mounted at center hub height.
- The front portion of the front bumper (the business end) must have a minimum height of eight (8") inches. New design front bumpers will be available from Meg Wheels and Oval Speed Unlimited.
- The front bumper must always be attached and in a safe condition by official's discretion to enter the racetrack.

REAR BUMPER

- Any type bumper will be allowed as long as it is at least three inches (3") in height.
- No longer than seventy inches (70").
- Each end must be capped.
- No bolt heads on outside of bumper.
- The center of the rear bumper must be mounted at center hub height.

CORNER BARS

- Both bars should cover area of twelve (12) and eighteen (18) inches from the ground, and be bolted to the inside of the rear bumper.
- Corner bars must be behind the tires not to extend past the sidewall of the tires.

SIDE BARS

- Will not be tied into chassis in more than six (6) places.
- Bottom bar should be near center line of rear axle and front spindle.
- The topside bar must attach to main roll bar and extend to the forward point of bottom bar.
- Must not exceed more than two inches (2") of outside tires.

STEEL TUBING SIZES FOR BUMPERS

- Bars will be no smaller than one and one quarter inches (1 ¼") or larger than one and three quarter inches (1 ¾") of steel tubing.
- Steel tubing thickness will not be less than .083 inches or greater than .095 inches

CLUTCHES AND BELL HOUSING

- 7 1⁄4" Multi disc clutch allowed. Must have steel discs and plates. Aluminum or steel cover allowed. Steel flex plate only.
- Steel bell housings only. NO aluminum or magnesium bell housings will be permitted.

STARTER

• Starter must be in stock location.

BATTERY – ALTERNATOR

- Any volt battery may be used (gel type preferred).
- Batteries must be shielded and located outside driver's compartment between frame rails.
- Any alternator system mounted on the front of engine.
- A labeled on/off master battery switch must be in plain view.

ENGINE (Wall Motor)

- North American manufactured engines allowed by Ford, Chevy or Chrysler.
- CHEVROLET Block: Bore 4.060 ONLY Stroke 3.48 ONLY
- FORD Block: Bore 4.060 (Max) Stroke - 3.50 (Max)
 CHRYSLER Block: Bore - 4.040 (Max)
 - Stroke 3.58 (Max)

BLOCKS

- Must be an approved V-8 American manufactured cast-iron production block with maximum overbore to .060".
- Chevrolet, Ford & Chrysler: Maximum engine displacement of 358 cubic inches.
- No light weight blocks permitted.

CRANKSHAFT

 Any steel crankshaft is allowed providing it maintains stock stroke of manufactured engine block used.

<u>RODS</u>

• Stock production O.E.M. or after-market rods allowed.

PISTONS

- Flat top pistons only.
- JE Pistons optional parts numbers
 - 170692 30 over
 - 170693 40 over
 - 170694 60 over

VALVES

- Any steel valve can be used.
- Intake maximum size 2.020
- Exhaust maximum size 1.60
- Steel valves only. NO TITANIUM VALVES ALLOWED.
- Titanium retainers and locks permitted.
- Minimum valve stem size 5/16" minimum
- No altering of valve guide angle or location. Stock valve angles and spacing.

VALVE SPRINGS

- Any valve springs allowed.
- Any retainers will be allowed.

COMPRESSION

- Old Wall Motor 10:1
- Spec Motor 12:1
- Hybrid Motor 11:1 A hole must be drilled in the bell housing in order to turn the engine over to check compression.

ROCKER ARMS

• Any roller rocker arm systems allowed.

CARBURETOR

• Holley 4412

- 500 CFM 2 barrel carburetor for gas with no modifications.
- SK Legal cars may run 650 carburetor.
- The choke and choke housing may be removed, only Holley parts allowed.
- NO HP Holley or Billet parts.
- Maximum one-inch (1") adapter plate allowed. Flat top and bottom.
 - NOTHING PROTRUDING INTO THE INTAKE AND NOTHING INTO THE CARBURETOR.
- Two (2) paper gaskets, one (1) per side, maximum thickness (.065).
- Main jets and air bleeds can be changed.

IGNITION

- Magneto self-contained systems will be permitted
- (H.E.I.) self-contained ignition system will be permitted.
- The distributor must mount in the stock location and maintain the same firing order as a factory produced engine.
- No outside ignition box or outside coil allowed. Ford and Mopar must run stock type box and coil.
- No crank trigger systems will be permitted.

ENGINE LOCATION

- The block must be centered on the chassis within one-inch (1) to the frame.
- The crankshaft center line must be within one inch (1") of center line between ball joints.

OILING SYSTEM

- Pan must be minimum of six (6) inches in depth, made of steel or aluminum.
- No vacuum system or oil pan vent.
- Stock O.E.M. oil pump, must be at stock location.
- The use of combustion enhancing oils or additives is not permitted.
- ONE (1) INCH PIPE PLUG BETWEEN THE 1ST AND 2ND MAIN CAPS WITH NO VISUAL BLOCKING FROM CRANK SCRAPE.

RADIATORS, OVERFLOW, AND COOLANT

- Radiator must be located in front of engine.
- Overflow hose must be directed out towards right side of frame near the front roll cage bar.
- Tap water or distilled water only.
- Any competitor found to be using any coolant additive will be disqualified.

<u>HOOD</u>

• Hood must be on the car at all times. Any car without a hood for any reason will not be allowed on the race track due to safety concerns.

SHOCKS

- External reservoirs are not permitted.
- Remote or electronically controlled shock absorbers are not permitted.
- Shock price—Racer NET cannot exceed \$350.00.

STEERING COMPONENTS

- Steering shafts require at least five-eighths inch (5/8") shaft with safety U joints.
- All Steering Shafts from Rack to Steering Wheel must be magnetic steel
- Steering wheels made only of metal will be permitted.
- Center of steering wheel post must be padded.
- A quick-release magnetic steel coupling on the steering wheel is mandatory.

TRANSMISSION

- Richmond transmission, Jerico transmission or a stock O.E.M. case with minimum of two (2) forward and one (1) reverse.
- T 101 transmissions allowed.
- Transmissions must have conventional type shifters ONLY, No top loaders.

DRIVE SHAFT

- One piece steel drive shaft with steel U joints and yokes required.
- Driveshaft, Yokes and Universal Joints must be painted white.
- Two (2), three hundred sixty-degree (360°) solid steel brackets of two inches by one quarter inch (2" x 1/4") around drive shaft and torque arm required.
- Drive Shafts, Yokes, and U Joints *<u>must be magnetic steel</u>* only.

REAR END AND AXLE

- Quick change rears with backside cover only.
- Locked spool only, NO differentials, lockers, etc..
- No Titanium axles, magnetic-STEEL ONLY.
- Steel yokes only.

FRAME

- The rails must be at least two inches by three inches (2" x 3") of magnetic steel box tubing with minimum thickness of one eighth inch (1/8").
- Width starting from thirty-four inches (34") to forty-six inches (46").
- All kick-up must maintain a minimum angle of eighteen degrees (18°).

ROLL CAGE

- All roll cage material must be at least one and three quarter inches (1 ³/₄") in diameter with at least .090 wall steel tubing.
- Front and rear hoops should not be angled more than twenty degrees (20°) rearward.
- At least four (4) bars on left side and three (3) bars on right side of roll cage.
- All roll cages should have these bars as listed: main roll bar, two (2) front roll bars, roof bar, center line roof bar, diagonal main roll bar, dashboard bar, right, and left door bars, left side driver head bar, vent bars, rear down bars, front down bars, center windshield bar, vertical support bars.
- Vertical support bar must turn down and be welded at the front sub frame.
- Roll bars must be welded and gusseted.
- All bars must be padded wherever head or body may strike during an accident.
- All frames must be approved by the pit steward.
- Minimum clearance of three inches between the top of the roll cage and the top of the driver's helmet is mandatory.

REAR SPOILER

- No larger than fifty inches (50") wide and ten inches (10") in height from deck lid.
- Any support angle should be no larger than one-inch (1").

REAR VIEW MIRROR

- One mirror only mounted in upper windshield area.
- Left side spot mirrors are permitted.

ACCESSORIES

- Raceceivers are *mandatory!*
- Radios of two-way communication are allowed.
- No traction control devices of any kind permitted!!!

MUFFLERS

- Mufflers required, must be straight through type, must have provisions to lower decibel number, (holes, holes and dents, etc.).
- No straight through solid tube.
- Must be commercially available.
- Must be available to all competitors.

HEADERS

- Only four (4) tube type running into a single collector will be allowed.
- NO tri "Y" header.

- No header wrap.
- Exhaust turn out can not be turned up!

<u>FUEL</u>

- Gasoline only.
- Gas will be checked periodically by race officials for additives.
- No cooling cans or nitrous oxide.
- All WSS track fuels must be used in competition and purchased at the track.

GAS & LINKAGE PEDAL

- Must have return tab for foot on gas pedal.
- Three minimum return springs on linkage. One must be in opposing direction.

SEALED ENGINES

- All engines must be sealed before starting any race.
- The engine must be stone cold in order to check the compression and cubic inches.
- Any **tampering** with seal will result in forfeiting winnings and championship points.
- It is the **driver's** responsibility to have engine sealed.
- Sealed motors ONLY verify the compression and cubic inch at time of sealing. Motors can be rechecked at any time by Officials.

WALL STADIUM SPEEDWAY DOES NOT ALLOW TRACTION CONTROL OF ANY KIND. If traction control is detected:

- 1. Track takes possession of traction control and it is not returned.
- 2. Automatic disqualification.
- 3. All points accumulated are lost for the season.
- 4. No payout for the race and the loss of any previous payouts not yet picked up.

The age for participation is 17 with a valid Driver's License and sufficient racing experience.

Wall Stadium Speedway Management does not allow 16 year olds to compete in the Modified division.

- END -